



## In this Issue...

★ **Special  
Asthma Addition  
in honor of  
Asthma and  
Allergy Month**

This newsletter is provided by the Indiana Department of Environmental Management for child care facilities participating in the 5-Star Environmental Recognition Program. This newsletter provides updates on environmental issues affecting children. Please feel free to use these articles in your own newsletters. We encourage you to post this in areas where parents will have access to it.

If you have any questions or comments about the information included here, please contact Karen Teliha at 800-

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## How Are Children Affected By Asthma?

Asthma is the most common long-term childhood disease, affecting 4.8 million children. Nearly 1 in 13 school-aged children has asthma, and the percentage of children with asthma is rising more rapidly in preschool-aged children than in any other age group.

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Asthma accounts for one-third of all pediatric emergency room visits and is the fourth most common cause for physician office visits. Asthma is one of the leading causes of school absenteeism, accounting for over 10 million missed school days per year. Asthma also accounts for many nights of interrupted sleep, limitation of activity, and disruptions of family and care-giver routines. Asthma symptoms that are not severe enough to require a visit to an emergency room or to a physician can still be severe enough to prevent a child with asthma from living a fully active life.

## World Asthma Day 2001

World Asthma Day 2001 took place on May 3 as a kickoff event to Asthma and Allergy Month during May. The theme for the third annual World Asthma Day was Joining Together Against Asthma. Take time this month to make your facility "asthma proof". Consider using the enclosed Asthma Action Card for students with asthma.

It is important that every person with asthma be diagnosed, receive appropriate treatment, learn how to manage their asthma, and reduce exposure to environmental factors that make their asthma worse.



**World Asthma Day 2001**  
Join Together Against Asthma

## It Might Be Asthma If:

**...the child wheezes.** A recurrent cough, particularly at night, recurrent wheeze, recurrent difficulty in breathing and/or recurrent chest tightness can all be signs of asthma.

**...the child has play-related problems.** Exercise can trigger an asthma attack. It is estimated that 85% of allergic asthmatics have symptoms of wheezing during or following exercise.

**...a parent has asthma.** There is a strong genetic predisposition to asthma. Most experts believe there are complex inheritance factors which contribute to asthma.

**...the child has many allergies.** Children with asthma are particularly sensitive to animals, dust mites, pollen, molds, cigarettes and wood smoke.

**...the child has trouble at night.** Recurrent night cough can be a tip-off, since asthma is often worse at night.

**...the child's breathing is affected by changes in temperature, particularly cold weather.**

**...the child seems to be constantly battling respiratory infections, like bronchitis, pneumonia or even croup.** Asthma can be misdiagnosed as a respiratory infection and the patient is ineffectively treated with antibiotics.

**...the child has trouble breathing after crying or laughing.** Emotional responses may trigger asthma because they involve deep rapid breathing similar to running.

Text provided by the American Lung Association.

## The Indoor Air Quality (IAQ) Tools for Schools Kit

The Indoor Air Quality (IAQ) Tools for Schools Kit (Kit) shows schools how to carry out a practical plan of action to improve indoor air problems at little or no cost using straightforward activities and in-house staff. Indoor Air Quality Tools for Schools is co-sponsored by the National PTA, National Education Association, Council for American Private Education, Association of School Business Officials, American Federation of Teachers, and the American Lung Association.

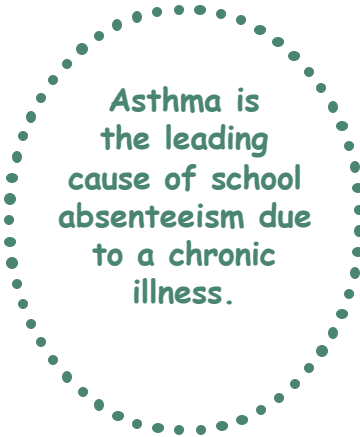
EPA's new action kit includes checklists for all school employees, a flexible step-by-step guide for coordinating the checklists, and Indoor Air Quality Problem Solving Wheel, a fact-sheet on indoor air pollution issues, and sample policies and memos. "Teachers, education support and other school support staff have a lot to think about," says Keith

Geiger, President of the National Education Association. "That is why this kit is so fantastic, it does so much of the thinking for you." In addition to the kit, the EPA, in conjunction with the cast and crew of the popular television series This

Old House, has produced a short video about how to properly operate and maintain ventilation systems in schools.

The IAQ Tools for Schools Kit, individual IAQ Problem Solving Wheels, and Taking Action and Ventilation Basics Videos are available free of charge and can be obtained by calling the IAQ INFO Clearinghouse at 1-800-438-4318.

The IAQ Tools for Schools Kit (Second Edition, December 2000) is also available on CD-ROM. The CD includes all written materials in the Kit, such as the IAQ Background, IAQ Coordinator's Guide, Checklists (including the new "Walkthrough" checklist) and other forms in both Adobe PDF and MS Windows Pagemaker 6.5+ format. To order, call 1-800-438-4318, ask for EPA document number 402-C-00-002, August 2000.



Asthma is the leading cause of school absenteeism due to a chronic illness.

# Here's help for the school teacher... if a child in your school has asthma.

## ***Common Symptoms and Signs of Asthma:***

- \_\_\_\_\_ Wheezing or
- \_\_\_\_\_ Feeling tightness or pain in the chest or
- \_\_\_\_\_ Coughing throughout the day or
- \_\_\_\_\_ Difficult breathing and shortness of breath or
- \_\_\_\_\_ Little energy for active play

## ***More Serious Symptoms and Signs that Need Quick Medical Attention***

- \_\_\_\_\_ The child's wheeze, cough or shortness of breath worsens, even after the medicine has been given time to work (most inhaled bronchodilator medicines produce an effect within 5 to 10 minutes) or
- \_\_\_\_\_ The child feels uncomfortable and is having trouble breathing, but you don't hear wheezing sounds (this may still indicate extreme bronchial distress) or
- \_\_\_\_\_ The child has trouble walking or talking, stops playing and cannot start again or
- \_\_\_\_\_ The child's chest and neck are pulled or sucked in with each breath or
- \_\_\_\_\_ The child's peak flow rate gets lower, or does not improve after treatment with bronchodilators, or drops to 50% of the child's personal best (check with the school nurse or the appropriate personnel about the peak flow measurement) or
- \_\_\_\_\_ The child's lips or fingernails are grey or blue. If this happens, the child needs emergency care right away!

## ***First Aid Tips For Breathing Difficulties***

Help the child to sit in a comfortable position with shoulders relaxed. Leaning forward with elbows on knees may be helpful.

Talk reassuringly to the child.

If there's an asthma action plan for this child, follow the steps prescribed by the child's doctor.

Encourage the child to take appropriate medicine that the child's doctor has prescribed.

If the medicines do not appear to be working effectively, notify the school nurse (or school administrator who handles these situations) and the parent or guardian. In some cases, children with asthma need emergency care.

## ***What You Can Do***

Find out which students have asthma. A conference with the parent, child, teacher, and school nurse may be needed.

Discuss the child's asthma, medicines, and school management. This information can be entered into an asthma action plan for the child. Make certain copies of the plan are easily accessible. The plan should have information about the child's symptoms and signs, type of medicines and dosages needed, the peak flow readings, what to do in emergencies and whom to contact.

You are in control of the classroom environment. Understand what starts the child's asthma and make the classroom as "trigger-free" as possible. Help the child avoid triggers such as excessive dust, sharp odors, other children with respiratory infections, and very cold air.

On very cold days, it may be best to have the child spend recess time indoors. A friend may wish to join in the indoor activities. During the pollen season,

children allergic to pollen should not sit near opened windows.

Birds and furry animals, strong odors from cosmetics, chemicals and art supplies can sometimes trigger asthma. If possible, remove such irritants from the classroom. Gym mats, shoes, lockers, as well as old library books are often loaded with dust and molds. Regular cleaning and airing can help.

Encourage children to be as active as possible and to participate in physical education activities. Children will learn their limits. Not all children will be capable of normal activity. They can stop playing if wheezing or coughing begins. Have them do warm-up exercises before playing. Also, some medicines can be taken prior to physical activity in order to prevent episodes.

Children with severe asthma may miss school. You can provide extra encouragement and time to help children keep up with classwork.

If the child seems unusually tired, inattentive or hyperactive, advise the school nurse or parents, as changes in the child's asthma management may be needed. Encourage parents to get continuous asthma care for their child. Lack of ongoing, regular asthma care can lead to serious problems.

### ***General Information About Asthma***

Asthma is the most common chronic illness among children. Most children with asthma have relatively mild cases that can be controlled by medicine.

Asthma is characterized by:

- airway inflammation
- airway hyperresponsiveness
- airway obstruction

Thus, breathing difficulty is caused by changes in the air passages of the lungs:

- inside walls of the airways swell up
- muscles in the walls of the airways tighten and

constrict

-swollen walls produce excess mucus, which clogs the airways

The child struggles to breathe. It is very difficult to get air in and out of the lungs.

Each child may react differently to asthma triggers. Factors that may trigger asthma include:

\_\_\_\_respiratory infections, colds

\_\_\_\_allergic reactions to pollen, mold, animal dander, feathers, dust, food

\_\_\_\_vigorous exercise

\_\_\_\_exposure to cold air or sudden temperature changes

\_\_\_\_air pollution, fumes, or strong odors

\_\_\_\_cigarette smoke

\_\_\_\_excitement, stress

### ***The Teacher as Friend***

Children with asthma may feel scared and different than other classmates. The teacher, by knowing what to do and by treating children with understanding and kindness, can help to empower them and reduce their fear of asthma. If it is possible to do without embarrassing children with asthma, explain to the class what asthma is, its effects on breathing, and how classmates can be helpful. To assist in this, the American Lung Association's Open Airways For Schools Program provides asthma education and management skills specifically for children with asthma, and can help create a supportive environment and a comprehensive approach to asthma management in your school.

\*Text provide by the American Lung Association